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09/853,957	05/11/2001	Richard Dean Dettinger	ROC920000310US1	6601

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EXAMINER

LEE, PHILIP C

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/853,957	Applicant(s) DETTINGER, RICHARD DEAN	
	Examiner Philip C. Lee	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-19,21 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-19,21 and 23-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This action is responsive to the amendment and remarks filed on August 19, 2005.
2. Claims 1-2, 4, 6-19, 21 and 23-34 are presented for examination. Claims 3, 5, 20 and 22 are canceled.
3. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Claim Rejections - 35 USC 112

4. Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Claim language in the following claims is not clearly understood:
 - i. As per claim 1, line 3, it is unclear what is “an initial portion of a client command” (i.e. Does it mean at least one of a plurality of SQL statements in a client command?); Lines 5-6, it is unclear what is “remaining portions of the client command” (i.e. Does it mean all of the plurality of SQL statements in the client command?).

- ii. As per claim 11, lines 6-7, it has the same unclear claim language as set forth in claim 1 above.
- iii. As per claim 18, lines 3-4, it has the same unclear claim language as set forth in claim 1 above.
- iv. As per claim 28, lines 10-12, it has the same unclear claim language as set forth in claim 1 above.

Claim Rejections – 35 USC 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Aaker, U.S. Patent 5,758,087 (hereinafter Aaker).

7. Aaker was cited in the last office action.

8. As per claim 1, Aaker taught the invention as claimed, comprising:

receiving an initial portion of a client command from a client computer (col. 5, lines 47-57);

predicting what the client command will be when completely received based on the initial portion of the client command (col. 5, lines 47-57), prior to receiving remaining portions of the command from the client computer (Note that since the first or current request (i.e., portion of the client command) is use to predict the next request (i.e., remaining portion of the client command), therefore it is inherent that prediction of the client command is made prior to receiving all or remaining portion of the command) (col. 3, lines 20-26);
executing the predicted client command (col. 5, lines 47-57);

receiving the remaining portions of the client command from the client computer (col. 5, lines 34-35);

determining whether the complete client command matches the predicted client command (col. 5, lines 47-57); and

if the complete client command matches the predicted command, sending a result of executing the predicted command to the client computer (col. 5, lines 35-36, 47-57).

9. As per claim 2, Aaker taught the invention substantially as claimed in claim 1 above. Aaker further taught wherein predicting the client command comprises determining a matching command for the initial portion of the client command (col. 5, lines 47-57; col. 6, lines 15-26) and wherein executing the predicted client command comprises executing the matching command (col. 5, lines 47-57; col. 6, lines 15-26).

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10. As per claim 6, Aaker taught the invention as claimed in claim 1 above. Aaker further taught comprising:

determining whether the result of executing the predicted client command is correct (col. 5, lines 47-57);

if not, receiving a remaining portion of the client command from the client computer (col. 5, lines 47-57); and

sending a result of executing the complete client command, as received in its entirety from the client compute, to the client computer (col. 5, lines 47-50).

Claim Rejections – 35 USC 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aaker et al, U.S. Patent 5,758,087 (hereinafter Aaker).

13. As per claim 7, Aaker taught the invention substantially as claimed in claim 6 above. Aaker further taught wherein determining whether the result of executing the predicted client command is correct comprises:

predicting the client command based on the portion of the client command (col. 5, lines 47-57);

determining whether the complete client command matches the predicted command (col. 5, lines 47-57; col. 6, lines 15-26); and

if not, sending a result of executing the client command, as received in its entirety from the client compute, to the client computer (col. 5, lines 47-50).

14. Although, Aaker did not specifically disclose detailing the method of predicting the client command can be performed at the client computer, however, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to include the method of predicting the client command at the client computer because doing so it would increase the efficiency of Aaker's system by reducing the network traffic for processing the method of prediction between the client and server.

(Note that it is inherent that if the method of predicting the client command is performed at the client computer, it is inherent that if client command does not match, the client command must be sent in its entirety along with a flag indicating an unsuccessful prediction form the client computer to the server computer).

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15. Claims 4, 8, 11-14, 16-19, 21, 23-25, 28-29 and 31-32 are rejected under 35 U.S.C.

103(a) as being unpatentable over Aaker et al, U.S. Patent 5,758,087 (hereinafter Aaker) in view of Luick, U.S. Patent 6,230,260 (hereinafter Luick).

16. Luick was cited in the last office action.

17. As per claims 11 and 18, Aaker taught the invention substantially as claimed, comprising: commands expected to be received from the client computer (col. 6, lines 15-26); and determine a predicted complete command in response to receiving an initial portion of a client command from the client command (col. 5, lines 47-57) prior to receiving a remaining portion of the client command (Note that since the first or current request (i.e., portion of the client command) is use to predict the next request (i.e., remaining portion of the client command), therefore it is inherent that prediction of the client command is made prior to receiving all or remaining portion of the command) (col. 3, lines 20-26).

18. Aaker did not teach a command set database and a processor configured to determine a predicted command. Luick taught an invention comprising:

a command set database, wherein the command set database comprises commands expected to be received (col. 6, lines 25-30); and

a processor configured to determine predicted command from the command set database (col. 6, lines 15-24; col. 9, lines 21-24).

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19. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Aaker and Luick because Luick's teaching of a command set database and a processor configured to determine predicted command would increase the efficiency of Aaker's system by minimizing the delays associated with the execution of the received commands (col. 3, lines 18-23).

20. As per claims 17 and 28, Aaker taught the invention substantially as claimed comprising: receive portions of commands from a client computer connected to the network (col. 5, lines 47-57; fig. 1).

commands expected to be received by the client computer (col. 6, lines 15-26); and to predicted a complete command in response to receiving an initial portion of a client command from a client computer (col. 5, lines 47-57), prior to receiving remaining portions of the client command from the client computer (Note that since the first or current request (i.e., portion of the client command) is use to predict the next request (i.e., remaining portion of the client command), therefore it is inherent that prediction of the client command is made prior to receiving all or remaining portion of the command) (col. 3, lines 20-26).

21. Aaker did not teach a command set database and a processor configured to determine a predicted command. Luick taught an invention comprising:

an input memory area to receive commands (col. 3, line 64-col. 4, lines 9; col. 7, lines 31-39; col. 11, lines 60-62);

a command set database, wherein the command set database comprises commands expected to be received (col. 6, lines 25-30);
an output memory area to stored results generated by executing commands received (col. 12, lines 16-42); and
a processor configured to determine predicted command from the command set database (col. 6, lines 15-24; col. 9, lines 21-24).

22. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Aaker and Luick because Luick's teaching of a command set database and a processor configured to determine predicted command would increase the efficiency of Aaker's system by minimizing the delays associated with the execution of the received commands (col. 3, lines 18-23).

23. As per claim 19, Aaker and Luick taught the invention substantially as claimed in claim 18 above. Aaker and Luick further taught wherein determining whether matching command exists for the received portion of the client command (see Aaker, col. 5, lines 47-57; col. 6, lines 15-26) comparing the received portion of the command to commands in a command set database (See Luick, col. 6, lines 25-30; col. 11, lines 64-col. 12, lines 2).

24. As per claims 12 and 29, Aaker and Luick taught the invention substantially as claimed in claim 11 and 28 above. Luick further taught wherein the processor is configured to determine the predicted command by:

determining whether a matching command exists in the command set database for the portion of the command received (col. 3, lines 64-col. 4, lines 9; col. 12, lines 3-6) in an input memory area (col. 3, line 64-col. 4, lines 9; col. 7, lines 31-39; col. 11, lines 60-62); if so, executing the predicted command (col. 4, lines 18-22); and storing a result of executing the predicted command in an output memory area (col. 12, lines 16-42).

25. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Aaker and Luick for the reason set forth in claims 11 and 28 above.

26. As per claims 4 and 21, Aaker and Luick taught the invention substantially as claimed in claims 3 and 20 above. Aaker and Luick further taught comprising:

if the complete client command does not match the predicted command, executing the complete client command as received from the client computer (Luick, col. 12, lines 19-46); and

sending a result of executing the complete client command, as received from the client computer, to the client computer (Aaker, col. 5, lines 47-50).

27. As per claims 13-14, 23 and 31-32, Aaker and Luick taught the invention substantially as claimed in claims 11, 18 and 28 above. Aaker further taught comprising:

determining whether the result of executing the predicted client command is correct (col. 5, lines 47-57);

if not, sending a result of executing the complete client command to the client computer (col. 5, lines 47-50).

28. As per claim 24, Aaker and Luick taught the invention substantially as claimed in claim 23 above. Aaker and Luick further taught wherein determining whether the result of executing the predicted client command is correct comprises:

predicting the client command based on the portion of the client command (see Aaker, col. 5, lines 47-57);

determining whether the complete client command matches the predicted command (see Aaker, col. 5, lines 47-57; col. 6, lines 15-26); and

if not, sending the complete client command to the client computer (see Aaker, col. 5, lines 47-50).

29. Although, Aaker and Luick did not specifically disclose detailing the method of predicting the client command can be performed at the client computer, however, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to include the method of predicting the client command at the client computer because doing so it would increase the efficiency of Aaker's and Luick's systems by reducing the network traffic for processing the method of prediction between the client and server.

(Note that it is inherent that if the method of predicting the client command is performed at the client computer, it is inherent that if client command does not match, the client command must be sent in its entirety along with a flag indicating an unsuccessful prediction from the client computer to the server computer).

30. As per claims 8, Aaker taught the invention as claimed in claim 7 above. Although Aaker taught wherein predicting the client command comprises determining a matching command for the portion of the client command by comparing a portion of the client command sent to the server computer with command sets (see Aaker, col. 5, lines 47-57; col. 6, lines 15-26), Aaker, however, did not teach a command set database. Luick taught a similar system comprising a command set database (see Luick, col. 8, lines 66-col. 9, lines 5; col. 11, lines 62-col. 12, lines 6).

31. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include the method of predicting the client command at the client computer because doing so it would increase the efficiency of Aaker's and Luick's systems by reducing the network traffic for processing the method of prediction between the client and server.

32. As per claim 25, Aaker and Luick taught the invention substantially as claimed in claim 24 above. Aaker and Luick further taught wherein determining whether the client command matches the predicted command (see Aaker, col. 5, lines 47-57) comprises comparing the

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complete client command to entries (see Aaker, col. 5, lines 47-57; col. 6, lines 15-26) in a database (see Luick, col. 8, lines 66-col. 9, lines 5; col. 11, lines 62-col. 12, lines 6).

33. As per claim 16, Aaker and Luick taught the invention substantially as claimed in claim 11 above. Aaker further taught wherein the server computer and the client computer are connected through a network (fig 1).

34. Claims 9-10, 15, 26-27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aaker and Luick in view of Yashiro et al, U.S. Patent 5,787,460 (hereinafter Yashiro).

35. Yashiro was cited in the last office action.

36. As per claims 9-10, 15, 26-27 and 30, Aaker and Luick further taught the invention comprising generating a database of repeated client commands wherein the repeated client commands are received by the server (see Luick, col. 9, lines 46-48; col. 6, lines 15-30; col. 21, lines 9-18). Aaker and Luick did not specifically detailing wherein the commands are received at least twice by the server. Yashiro taught generating a database based on a predetermined number of repetitions (col. 25, lines 11-23).

37. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Aaker, Luick and Yashiro because Yashiro's teaching of generating a database based on a predetermined number of repetitions would increase

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the efficiency of Aaker's and Luick's systems by limiting the traffic for accessing to the database.

38. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aaker in view of Brye, U.S. Patent 6,718,322 (hereinafter Brye).

39. Brye was cited in the last office action.

40. As per claim 33, Aaker taught the invention as claimed in claim 1 above. Aaker further taught wherein:

receiving the portion of the client command from the client computer comprises receiving one or more, but not all, of the statements (col. 5, lines 47-57) (Note that since the first or current request (i.e., portion of the client command) is use to predict the next request (i.e., remaining portion of the client command), therefore it is inherent that prediction of the client command is made prior to receiving all or remaining portion of the command) (col. 3, lines 20-26).

41. Aaker did not specifically disclose that the client command is a set of statements forming a database request. Brye taught the client command comprises a set of statements forming a database request (col. 10, lines 10-30).

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42. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Aaker and Brye because Brye's teaching of client command as a set of statements forming a database request would increase the efficiency of Aaker's system by minimizing the delays associated with the execution of database request.

43. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aaker and Luick in view of Brye.

44. As per claim 34, Aaker and Luick taught the invention substantially as claimed in claim 11 above. Although, Aaker and Luick taught wherein:

the command set database comprises requests expected to be received (see Luick, col. 6, lines 25-30) from the client computer (see Aaker, col. 6, lines 15-26); and the processor is configured to determine predicted request from the command set database in response to receiving one or more query forming a client request (see Aaker, col. 5, lines 47-57; col. 6, lines 15-26), Aaker and Luick, however, did not teach one or more statements forming a database request and a database. Brye taught one or more statements forming a database request (col. 10, lines 10-30) and a server computer comprises a database (fig. 1) queryable by database requests received from the client computer (fig. 1; col. 4, lines 52-65; col. 10, lines 10-30).

45. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Aaker, Luick and Brye because Brye's teaching

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of client command as a set of statements forming a database request would increase the efficiency of Aaker's and Luick's systems by minimizing the delays associated with the execution of database request.

46. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takeda et al, U.S. Patent 6,483,845, disclosed a method of predicting a response packet based on a request packet.

Aaker et al, U.S. Patent 5,930,252, disclosed a method of predicting a next request and preparing a next response.

47. Applicant's arguments with respect to claims 1-34, filed 08/19/05, have been fully considered but are not deemed to be persuasive.

48. In the remark applicant argued that

(1) Aaker does not disclose predicting, based on an initial received portion of a client command, the complete client command prior to receiving remaining portions of the client request.

49. In response to point (1), Aaker taught a server predicting the client's next request based on the present client's request (abstract). Examiner interpreted client command in the claimed

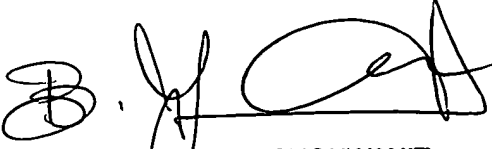
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invention as comprising more than one request (e.g. two requests or a plurality of requests).

Furthermore, the initial portion of the client command as being the present client's request and the remaining portion of the client command as being the client's next request. Accordingly, Aaker taught predicting, based on an initial received portion of a client command (i.e. client's present request), the complete client command prior to receiving remaining portions of the client command (i.e. client's next request) as recited in claim 1 (col. 3, lines 20-26; col. 5, lines 47-57).

50. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P.L.



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